



**First Training workshop and symposium MURIA Group 27 – 29 July 2015
University of Botswana, Botswana**

Monday 27 July 2015. Venue: Auditorium 1. Chair: Amos Massele

08.45 – 09.30	Registration and putting up Posters (Posters to be available throughout)
09.30 – 09.35	Prayer – Voluntary
09.35.- 10.00	Opening of the conference including the agenda and logistics – Prof. Amos Massele and Dr. Brian Godman
10.00 -10.30	Coffee/tea break
10:30 – 10:50	Welcome Remarks and Introducing the Guest of Honour by DVC/AA University of Botswana
10.50- 11.30	Official Opening of the Conference by the Guest of Honour – Minister of Health of Botswana – Hon Dorcus Makgato
11.30 – 18.30	Workshop activities (in Groups including lunch)
	First Session Introduction group: Basic methodologies. Chair: Rianda Joubert. Venue; Auditorium 1
11.30 – 12.30	Introduction to DU research including methodological frameworks and examples – Prof. Ilse Truter Areas covered include: Historical overview; Types of information and sources of data; Methodologies, tools and analysis; Role in rational drug use, evidence-based medicine and pharmacoeconomics; Practical, interactive examples and case studies will focus on DU research and antimicrobials
12.30 – 13.30	ATC classification, DDDs/ PDDs, examples and group working – Dr. Margaret Oluka Areas covered include: Definition and application of drug classification systems; Different types of classification systems; ATC classification and examples; application/ implementation; Recourses; Drug utilization metrics-DDD, PDD, concept and definition; rationale and application; worked examples
13.30 – 14.30	Lunch and viewing of posters

First Session continued Introduction group: Basic methodologies. Chair: Rianda Joubert. Venue; Auditorium 1	
14.30 – 15.30	DU indicators including denominators and data sources – Dr. Olayinka Ogunleye Areas covered include: Purpose and Objectives of DU indicators; Types/Classification of DU indicators: Definitions and Measurements of DU indicators; Conducting DU indicator studies including denominators, data Sources, e.g. large databases and supplier data, practice setting including community settings; Diagnoses and Non –Diagnoses Linked Sources; Scope of Data Sources; Worked Examples.
15.30 – 16.15	Introduction to influencing physician prescribing behaviour and cross national comparative studies – Dr. Brian Godman Areas covered include: Different methods to influence physician prescribing behaviour (4Es – Education, Engineering, Economics and Enforcement) and their influence/ impact using drug utilisation studies allied to health policy. This will be based on pertinent examples across countries to give guidance
Advanced group: Advanced methodologies. Chair: Dr. Joseph Fadare. Venue: Auditorium 2	
11.30 – 13.30	Issues, challenges and ways these have been addressed through case histories <ul style="list-style-type: none"> • DU of antibiotics within and across countries including AMR rates – Mr. Andrew Gray. Areas covered include: ATC/DDD methods for antibiotics; choices of appropriate denominators (and challenges that are particular to developing countries); examples of national and regional surveillance systems; potential sources of data • Examples of novel approaches/ challenges – Dr. Matthias Adorka. Areas covered include: Assessing the appropriateness of antibiotic prescriptions in Lesotho public hospitals: a novel methodology based on principles of antibiotic prescribing”. This also includes the challenges of using of retrospective data in drug effectiveness studies • Challenges with quantitative and qualitative approaches – Dr. Brent Knoesen. Areas covered include: <ul style="list-style-type: none"> ○ Exploring mixed methodologies in drug utilisation. ○ Discussing the following sub-topics with respect to qualitative research: <ul style="list-style-type: none"> ▪ lack of use of qualitative research in drug utilisation ▪ Importance of qualitative research in drug utilisation ▪ How qualitative research can be combined with quantitative research.
13.30 – 14:30	Lunch and viewing of posters

Advanced group: Advanced methodologies. Chair: Dr. Joseph Fadare. Venue: Auditorium 2	
14.30 – 15.30	Influencing prescribing/ guidelines including 4Es/ challenges of Cross National Comparative (CNC) studies – Dr. Brian Godman and Dr. Jaran Eriksen Areas covered include: <ul style="list-style-type: none"> • Dr. Brian Godman – More in-depth analysis of methods to influence physician prescribing behaviour (4Es – Education, Engineering, Economics and Enforcement) and their influence/ impact using drug utilisation studies allied to health policy. In addition, challenges of CNC studies and potential ways to address this • Dr. Jaran Eriksen – Challenges of conducting research on medicine use across multiple countries
15.30– 16.15	Brief introduction to pharmacoconomics – Dr. Johanita Burger Areas covered include: Rationale and importance of pharmaco-economic analysis; Cost and consequences associated with pharmacy products and services; Differences between cost-benefit analysis, cost-effective analysis, cost-minimisation analysis and cost-utility analysis; Steps in conducting a pharmaco-economic analysis; and application of pharmaco-economic analysis to various pharmacy settings
16.15 - 16.45	Coffee/ tea

b) Second session: Statistics Chair Introduction Group: Dr. Brian Godman – Venue: Auditorium 1. Chair Advanced Group: Dr. Jaran Eriksen, Venue Auditorium 2	
Introduction group	
16.45 – 18.15	Basic statistics applied to DU research – Mrs. Marike Cockeran
Advanced group	
16.45 – 18.15	Advanced statistical methods for DU research – Dr. Theunis Kotze & Prof Ilse Truter Areas covered include: It is not difficult to display a univariate distribution graphically. This holds for the theoretical distribution of categorical, ordinal (nominal and discrete) as well as interval (continuous) measurements. Just as there are theoretical distributions that exist virtually, there are processes in the practical (real life) that give rise to corresponding stochastically influenced observations. This will be illustrated for several discrete distributions like Pareto, Binomial and Poisson, and adapted for Multivariate distributions. These methods were applied to data supplied by an extensive pharmaceutical chain group
18.15 – 20.30	Welcome Reception (University)

**Tuesday 28th July 2015: Introduction Group – Auditorium 1
Advanced Group – Auditorium 2**

08.25– 08.30	Prayer – Voluntary
08:30 – 08:45	Welcome and outline Day 2 – Prof. Amos Massele
c) Third session Introduction group: Practice and ethics. Chair: Amos Massele. Venue: Auditorium 1	
08.45-9.45	The use of DUR studies to answer different practice questions – Dr. Rianda Joubert and Dr. Jaran Eriksen Areas covered in the presentations followed by questions include: <ul style="list-style-type: none"> • Dr. Rianda Joubert – The use of medicine claims databases for retrospective longitudinal studies, for e.g. longitudinal prescribing patterns of antibiotics, prevalence of chronic diseases, and drug-drug interactions in ARV's. In addition, determine the influence of policies on influencing subsequent prescribing patterns, e.g. prescribing of Roaccutane • Dr. Jaran Eriksen – Using household surveys to assess drug utilisation patterns, e.g. home treatment of malaria
09.45-10.15	Coffee/tea break
10.15 -11.15	The use of DUR studies to answer different practice questions (continued) – Dr. Rianda Joubert and Dr. Jaran Eriksen
11:15-13.00	Introduction to Ethics – Mr. Andrew Gray, Dr. Olayinka Ogunleye and Dr. Jaran Eriksen Areas covered include: <ul style="list-style-type: none"> • Mr. Andrew Gray – Basic principles of medical and research ethics; informed consent; transparency; particular challenges with retrospective research and epidemiological research (with examples from South African guidelines); the challenge of non-therapeutic research in children and adolescents • Dr. Olayinka Ogunleye • Dr. Jaran Eriksen
Advanced group: Issues and challenges with DU studies including databases, communication and ethics. Chair: Prof Lars Gustafsson. Venue: Auditorium 2	
08.45-9.45	DU visualisation and communication; pharmacovigilance; safety and databases – Dr. Brian Godman and Prof Lars Gustafsson Areas covered include: <ul style="list-style-type: none"> • Prof Lars Gustafsson –Drug safety and use of databases in drug utilization research • Dr. Brian Godman – Communicating DU studies among health authorities and others to influence future prescribing practices – practical examples from across countries
09.45 – 10.15	Tea/Coffee

10.15-11.15	DU visualisation and communication; pharmacovigilance; safety and databases continued..... Dr. Brian Godman and Prof Lars Gustafsson
11:15-12.15	Dealing with ethics: Issues and Challenges – Dr. Joseph Fadare Areas covered include: Importance of ethics in drug utilization research; theories and principles of biomedical ethics; peculiarities of ethical issues in drug utilization research; ethical guidelines/regulation; approaches to solving some of these dilemma in resource-limited settings (with examples from literature and research experience)
12.15-13.00	Reflexions on DUR in Africa: Possibilities and challenges Group Discussion including potential ways forward led by Dr. Joseph Fadare and Prof Lars Gustafsson
13.00 – 14.00	Lunch Including viewing of the posters

Tuesday 28th July 2015: 14:00 – 17:30 Symposium – Auditorium 1

14.00 – 14.15	Opening of Symposium – Prof Amos Massele
14:15 – 14:30	History of MURIA – Group: Prof Ilse Truter
14.30 – 17.30	Oral presentations – Anti-Infectives. Session Chairs: Jaran Eriksen and Andy Gray
14.30 – 14.45	Dr. Sarah Nanzigu (Uganda) – Utilization of Immunological Markers in HIV/ART Monitoring: Towards Universal ART Access and Effectiveness
14.45 – 15.00	Mr. Francis Kalemeera (Namibia) – Assessment of Nevirapine-related Adverse Reaction Reports Received from 2008 to 2011 in Namibia
15.00 – 15.15	Dr. N L Katende-Kyenda (South Africa) – Evaluation of adherence and treatment response among HIV-Infected patients on HAART in a primary healthcare clinic in South Africa.
15.15 – 15.30	Mrs. Razia Gaida (South Africa) – A Systematic Review of Efavirenz and Neuropsychiatric Side Effects
15.30 – 15.45	Mr. Ogochukwu Mbachu – Drug use Policy and its' Impact on Antibacterial Prescribing in Government Hospitals in Swaziland
15.45 – 16.15	Coffee/Tea and Poster Viewing
16.15 – 16.30	Mr. Bene D Anand Paramadhas (Botswana) – Antibiotic prescription patterns in HIV infected patients - an analysis of the relationship between CD4 count and antibiotic treatment outcomes at a tertiary care hospital in Botswana.
16.30– 17.00	Dr. Matthias Adorka (Namibia) – Making Antibiotic Choices: Formula Derivation and Usage in the Rational Selection of Antibiotics in the Empirical Treatment of Infections
17.00 – 17.15	Ms. Thatoyaone Kenaope (Botswana) – Antibiotic dispensing behaviour: Public and private sector pharmacies in Nelson Mandela Bay, South Africa
17.15 – 17.30	Close and Transport back to the hotels
19.30 – late	Conference Dinner

Wednesday 29th July 2015: 08:30 – 12:30: Auditorium 1

08.30– 08.45	Introduction to the last morning – Prof Amos Massele
08.45 – 10.15	Oral presentations – Anti-infectives and DU issues Chairs: Brian Godman and Olayinka Ogunleye
08.45 – 09.00	Mr. Mwangana Mubita (Zambia) – An audit of compliance with the antimicrobial prescribing care bundle in Internal Medicine at University Teaching Hospital in Zambia
09.00 – 09.15	Dr Johanita Burger (South Africa) – Fluoroquinolone Prescribing Patterns In The Private Healthcare Sector Of South Africa, 2005-2012
09.15– 09.30	Mr. Dan Kibuule (Namibia) – Evaluation Of Antibiotic Use In The Treatment Of Acute Respiratory Infections (ARI) In Children Under-Five At Households In Kampala-Uganda
09.30 – 09.45	Prof Ilse Truter (South Africa) – Combination analgesics
09.45 – 10.00	Prof Ehije Enato (Nigeria) - Patterns of Paediatric Analgesic use in Africa: A systematic review
10.00 – 10.15	Dr Paulina van Zyl (South Africa) – Co-Morbidity Of And Treatment For Irritable Bowel Syndrome, Depression And Anxiety In Residents Of Retirement Villages
10.15 – 11.00	Coffee/ tea and poster viewing
11.00 – 12.30	Oral presentations – Drug utilisation patterns (various Chairs: Lars Gustafsson and Ilse Truter
11.00 – 11.15	Dr. Adedunni W. Olusanya (Nigeria) – Drug use pattern in patients with epilepsy: Effect on drug compliance, seizure control and reports of adverse effects.
11.15 – 11.30	Ms. Margaret Ambetsa/Dr. Margaret Oluke (Kenya) – One-day Drug Utilization Review of Prescribing Practices and Patterns at Kenyatta National Hospital Out-Patient Department
11.30 11.45	Prof. Johan Lamprecht (Saudi Arabia) – Medicines utilisation research by pre-graduate students in the Kingdom of Saudi Arabia
11.45 – 12.00	Mrs Ester N. Naikaku (Namibia) – Complementary and Alternative Medicine: Comparing the Curricula of a South African and Namibian Pharmacy Programmes
12.00 – 12.30	Workshop Evaluation
12.30 – 13.00	Closing Remarks – Dr. Brian Godman and Prof. Vento (Dean of Faculty of Medicine)
13.00	Lunch and departure